1954] Habeeb,—Three Interesting Algae

CASTILLEJA COCCINEA (L.) Spreng., f. LUTESCENS Farw. The yellow flowers of this form brought a pleasing color variation to the undergrowth of the ash-poplar forest glowing with scarlet flowers of the typical form. Collection No. 16109 was made on June 21, 1953 along the road to Seven Beaver Lake, the headwaters of St. Louis River, near Toimi.

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CENTAUREA DUBIA Suter. This species was discovered along

the forest border of Highway 73, about 25 miles north of Chisholm in the northwestern part of St. Louis Co. These elegant plants in full flower, collection No. 16543, Aug. 3, 1953, added a new color tone among early flowering native composites.

HIERACIUM VULGATUM Fries. This adventive, collection No. 16197, came to the attention in the same area where *Carex pallescens* var. *neogaea* was discovered on July 17, 1953. The plant is well established, growing in abundance with masses of yellow flowering heads. The previous western limit of its range in the interior is Michigan.

The author wishes to acknowledge with gratitude the Graduate School of the University of Minnesota for the grant-in-aid of research of the St. Louis County flora used in part to defray the

cost of collecting.—Olga Lakela, UNIVERSITY OF MINNESOTA, DULUTH BRANCH.

THREE INTERESTING ALGAE FROM NEW JERSEY.-Zygnema novae-caesareae, sp. nov., Zygnema cum filamentis sterilibus 29–33 μ latis; filamenta rupta formant cellulas singulas quae tum copulant; zygospora globosa ad locos connexivos portantur in cellulis binis plus minus genuflexis, simulate sine tubo connexivo; zygospora in diametro $32-36-43 \mu$, cum membrana laevi. Zygnema with vegetative filaments 29-33 μ in diameter; filaments disintegrating into single cells which then conjugate by crossing and fusing into each other; zygospores round, membrane smooth, and with a diameter of $32-36-43 \mu$; zygospores being tightly contained at the point of fusion by the two more or less genuflexing cells.—NEW JERSEY: With Zygnema sp., etc. in a ditch, meadowland near the Passaic river at South Orange Avenue, Essex County, May 17, 1951, Herbert Habeeb 3756 (type). Two other numbers were collected from different parts of the same ditch, namely 3757 and 3758, but these contained

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only single cells and vegetative filaments. A collection of *Zygogonium ericetorum* Kütz. contained a few of our peculiar cross-celled zygosporangia; ditch, Brookside, Morris County, New Jersey, April 8, 1951, *Herbert Habeeb 3352*.

Zygnema novae-caesareae would seem to be in part the Zygnema insigne of Horatio C. Wood in A Contribution to the Fresh-Water Algae of North America especially fig. 8b plate XV. On the other hand fig. 8a plate XV is that of another form of Zygnema also found in New Jersey. This is a relative of Zygnema insigne (Hass.) Kütz., but differing from the typical plant in that the spores are found partially to completely in the conjugation tube; with about a third of the spores in one filament, a third in the conjugation tube, and a third in the second filament-often arranged in the form of a drawn out "S." This latter Zygnema, I propose to name as follows. ZYGNEMA INSIGNE (Hass.) Kütz., var. confusospora, var. nov., a forma typica differt: zygosporis vel partim vel omnino in tubo connexivo.-NEW JERSEY: In pasture pond with Spirogyra spp., New Brunswick, Middlesex County, April 21, 1951, Herbert Habeeb 3484 (type). Swale near the Passaic River at South Orange Avenue, Essex County, April 28, 1951, Herbert Habeeb 3527 (with Spirogyra spp. and Vaucheria sp.). The writer has also collected from New Jersey several numbers of typical Zygnema insigne (Hass.) Kütz. VAUCHERIA TERRESTRIS (Vauch.) DC., var. crenulata (Prescott), stat. nov. Vaucheria crenulata Prescott Amer. Midl. Nat. 50: 468–472. 1953.—NEW JERSEY: In a brook, $1\frac{1}{2}$ miles south of Cranberry Lake, Sussex County, April 15, 1951, Herbert Habeeb 3402.

The variety differs from the typical form in that its smaller filaments and gonidial branches are uniformly undulate. Dr. Prescott collected his specimens in Alaska.

Specimens of all the numbers cited above are deposited in the Cryptogamic Herbarium of the Chicago Natural History Museum, besides being retained in the collections of the writer.— HERBERT HABEEB. GRAND FALLS, NEW BRUNSWICK, AND SETON HALL UNIVERSITY.